

Application No. 10/657,852  
Response to Final Office Action mailed December 15, 2005

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-5 (cancelled).

Claim 6 (previously presented): An isolated polypeptide encoded by SEQ ID NO: 3.

Claim 7 (previously presented): An isolated polypeptide comprising SEQ ID NO: 15.

Claim 8 (original): The isolated polypeptide of claim 7, wherein the polypeptide is in multimeric form.

Claim 9 (currently amended): An isolated polypeptide comprising an amino acid sequence selected from the group consisting of:

- (a) sequences having at least 90% identity to SEQ ID NO: 15;
- (b) sequences having at least 95% identity to SEQ ID NO: 15;
- (c) sequences having at least 98% identity to SEQ ID NO: 15,

wherein the polypeptide possesses an ability to bind ice crystals and wherein there is no sequence variation in conserved domains.

Claims 10- 24 (cancelled).

Claim 25 (previously presented): A method for cryopreserving a cell or tissue, comprising contacting the cell or tissue with at least one polypeptide of any one of claims 6-8.

Claim 26 (previously presented): A food additive comprising a polypeptide of any one of claims 6-8.

Claim 27 (previously presented): A frozen food product comprising a food additive of claim 26.

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Claim 28 (previously presented): A method for decreasing an amount of time required to dehydrate a composition comprising contacting the composition with a polypeptide of any one of claims 6-8.

Claim 29 (previously presented): A composition comprising a polypeptide of any one of claims 6-8 and a physiologically acceptable carrier.

Claim 30 (cancelled): A method for the treatment of a disorder characterized by the presence of unwanted biocrystals in a patient, comprising administering to the patient a composition of claim 29.

Claim 31 (previously presented): A method for preserving the viability of a molecular biology reagent, comprising contacting the reagent with a polypeptide of any one of claims 6-8.

Claims 32 and 33 (cancelled).

Claim 34 (previously presented): A composition comprising at least one polypeptide of any one of claims 6-8 and an agricultural carrier.

Claim 35 (original): A method for protecting a plant from damage due to frost or freezing, comprising applying a composition of claim 34 to the plant.

Claim 36 (previously presented): A food additive comprising a polypeptide of claim 9.

Claim 37 (previously presented): A frozen food product comprising a food additive of claim 37.

Claim 38 (previously presented): A composition comprising a polypeptide of claim 9 and a physiologically acceptable carrier.

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Claim 39 (previously presented): A composition comprising a polypeptide of claim 9 and an agricultural carrier.